

What is claimed is:

1. A storage rack connectable to a mounting structure of a vehicle for supporting a load, comprising:

a load supporting structure adapted to support the load when the load is associated with the load supporting structure;

a bracket assembly connected to the load supporting structure, the bracket assembly being attachable to the mounting structure; and

a lift assembly associated with the load supporting structure for facilitating lifting of the load to the load supporting structure whereby the load can be supported by the load supporting structure and thus the vehicle when the bracket assembly connects the load supporting structure to the mounting structure of the vehicle.

2. The storage rack of claim 1 wherein the bracket assembly comprises a first flange having a distal end portion and a second flange having a distal end portion, the first flange connected to the load supporting structure, the first flange extending over and encompassing at least a portion of the mounting structure, the second flange connected to the load supporting structure and

extending over and encompassing at least of portion of the mounting structure so that the mounting structure is disposed between the distal end portion of the first flange and the distal end portion of the second flange.

3. The storage rack of claim 2 wherein the first flange of the bracket assembly is provided with a substantially U-shaped distal end portion and the second flange of the bracket assembly is provided with a substantially L-shaped distal end portion.

4. The bracket assembly of claim 2 wherein the first flange is provided with an aperture in the distal end portion thereof and wherein the bracket assembly further comprises:

- a clamp member positioned between at least a portion of the distal end portion of the first flange and the mounting structure such that a portion of the clamp member is disposed in a covered position relative to the aperture in the first flange; and

- an adjustment member disposable through the aperture in the first flange for compressing engagement with the clamp member of the mounting structure for securing the first flange of the bracket assembly to the mounting structure.

5. The storage rack of claim 4 wherein the load supporting structure is provided with at least one threaded bore and wherein the bracket assembly is provided with at least one aperture therein, the aperture being alignable with the at least one threaded bore in the load supporting structure; and a threaded bolt positionable through the aperture so as to threadingly engage the threaded bore and thereby connect the second flange of the bracket assembly to the load supporting structure.

6. The storage rack of claim 1 wherein the lift assembly comprises a lift member connected to the load supporting structure.

7. The storage rack of claim 6 wherein the lift member is connected to the platform of the load supporting structure.

8. The storage rack of claim 7 wherein the lift member is pivotally connected to the platform.

9. The storage rack of claim 6 wherein the lift assembly is pivotally connected to the load supporting structure.

10. The storage rack of claim 6 wherein the lift assembly further comprises

a lever connected to the lift member so as to permit the lift assembly to be folded to a folded position and moved to an extended position.

11. The storage rack of claim 10 wherein the lever is connected to the lift member near the distal end of the lift member.

12. The storage rack of claim 10 wherein the lever is pivotally connected to the lift member.

13. The storage rack of claim 6 wherein the lift assembly further comprises at least one guide, the at least one guide connected to the lift member for guiding the load onto the lift member.

14. The storage rack of claim 13 wherein the at least one guide is integrally connected to the lift member.

15. A storage rack connectable to a tail gate of a vehicle for supporting a load, comprising:

- a load supporting structure adapted to support the load when the load is associated with the load supporting structure;
- a bracket assembly connected to the load supporting structure, the bracket assembly being attachable to the tail gate; and
- a lift assembly associated with the load supporting structure for facilitating lifting of the load to the load supporting structure whereby the load can be supported by the load supporting structure and thus the vehicle when the bracket assembly connects the load supporting structure to the tail gate of the vehicle.

16. The storage rack of claim 15 wherein the bracket assembly comprises a first flange having a distal end portion and a second flange having a distal end portion, the first flange connected to the load supporting structure, the first flange extending over and encompassing at least a portion of the tail gate, the second flange connected to the load supporting structure and extending over and encompassing at least of portion of the tail gate so that the tail gate is disposed between the distal end portion of the first flange and the distal end portion of the second flange.

17. The storage rack of claim 16 wherein the first flange of the bracket assembly is provided with a substantially U-shaped distal end portion and the second flange of the bracket assembly is provided with a substantially L-shaped distal end portion.

18. The bracket assembly of claim 16 wherein the first flange is provided with an aperture in the distal end portion thereof and wherein the bracket assembly further comprises:

a clamp member positioned between at least a portion of the distal end portion of the first flange and the tail gate such that a portion of the clamp member is disposed in a covered position relative to the aperture in the first flange; and

an adjustment member disposable through the aperture in the first flange for compressing engagement with the clamp member of the tail gate for securing the first flange of the bracket assembly to the tail gate.

19. The storage rack of claim 18 wherein the load supporting structure is provided with at least one threaded bore and wherein the bracket assembly is provided with at least one aperture therein, the aperture being alignable with the at least one threaded bore in the load supporting structure; and a

threaded bolt positionable through the aperture so as to threadingly engage the threaded bore and thereby connect the second flange of the bracket assembly to the load supporting structure.

20. The storage rack of claim 15 wherein the lift assembly comprises a lift member connected to the load supporting structure.

21. The storage rack of claim 20 wherein the lift member is connected to the platform of the load supporting structure.

22. The storage rack of claim 21 wherein the lift member is pivotally connected to the platform.

23. The storage rack of claim 20 wherein the lift assembly is pivotally connected to the load supporting structure.

24. The storage rack of claim 20 wherein the lift assembly further comprises a lever connected to the lift member so as to permit the lift assembly to be folded to a folded position and moved to an extended position.

25. The storage rack of claim 24 wherein the lever is connected to the lift member near the distal end of the lift member.

26. The storage rack of claim 24 wherein the lever is pivotally connected to the lift member.

27. The storage rack of claim 20 wherein the lift assembly further comprises
at least one guide, the at least one guide connected to the lift member for guiding the load onto the lift member.

28. The storage rack of claim 27 wherein the at least one guide is integrally connected to the lift member.

29. A storage rack connectable to a tail gate of a vehicle for supporting a load, comprising:

a load supporting structure adapted to support the load when the
load is associated with the load supporting structure;
a bracket assembly connected to the load supporting structure,
the bracket assembly being attachable to the tail gate; and

a lift assembly pivotally connected to the load supporting structure for facilitating lifting of the load to the load supporting structure whereby the load can be supported by the load supporting structure and thus the vehicle when the bracket assembly connects the load supporting structure to the tail gate of the vehicle.

30. The storage rack of claim 29 wherein the bracket assembly comprises a first flange having a distal end portion and a second flange having a distal end portion, the first flange connected to the load supporting structure, the first flange extending over and encompassing at least a portion of the tail gate, the second flange connected to the load supporting structure and extending over and encompassing at least of portion of the tail gate so that the tail gate is disposed between the distal end portion of the first flange and the distal end portion of the second flange.

31. The storage rack of claim 30 wherein the first flange of the bracket assembly is provided with a substantially U-shaped distal end portion and the second flange of the bracket assembly is provided with a substantially L-shaped distal end portion.

32. The bracket assembly of claim 30 wherein the first flange is provided with an aperture in the distal end portion thereof and wherein the bracket assembly further comprises:

a clamp member positioned between at least a portion of the distal end portion of the first flange and the tail gate such that a portion of the clamp member is disposed in a covered position relative to the aperture in the first flange; and
an adjustment member disposable through the aperture in the first flange for compressing engagement with the clamp member of the tail gate for securing the first flange of the bracket assembly to the tail gate.

33. The storage rack of claim 32 wherein the load supporting structure is provided with at least one threaded bore and wherein the bracket assembly is provided with at least one aperture therein, the aperture being alignable with the at least one threaded bore in the load supporting structure; and a threaded bolt positionable through the aperture so as to threadingly engage the threaded bore and thereby connect the second flange of the bracket assembly to the load supporting structure.

34. The storage rack of claim 29 wherein the lift assembly comprises a lift

member pivotally connected to the load supporting structure.

35. The storage rack of claim 34 wherein the lift member is connected to the platform of the load supporting structure.

36. The storage rack of claim 35 wherein the lift member is pivotally connected to the platform.

37. The storage rack of claim 34 wherein the lift assembly is pivotally connected to the load supporting structure.

38. The storage rack of claim 34 wherein the lift assembly further comprises a lever connected to the lift member so as to permit the lift assembly to be folded to a folded position and moved to an extended position.

39. The storage rack of claim 38 wherein the lever is connected to the lift member near the distal end of the lift member.

40. The storage rack of claim 38 wherein the lever is pivotally connected to the lift member.

41. The storage rack of claim 34 wherein the lift assembly further comprises at least one guide, the at least one guide connected to the lift member for guiding the load onto the lift member.

42. The storage rack of claim 41 wherein the at least one guide is integrally connected to the lift member.

43. A storage rack connectable to a tail gate of a vehicle for supporting a tire, comprising:

- a load supporting structure adapted to support the tire when the tire is associated with the load supporting structure;

- a bracket assembly connected to the load supporting structure, the bracket assembly being attachable to the tail gate; and

- a lift assembly comprising:

- a lift member pivotally connected to the load supporting structure; and

- a lever connected to the lift member so as to permit the lift assembly to be folded to a folded position and moved to an extended position, the lever forming a ramp when the lever is positioned in the extended position whereby the tire can be rolled up the ramp formed by the lever and subsequently lifted to the load

supporting structure by movement of the lift member towards the load supporting structure.

44. The storage rack of claim 43 wherein the bracket assembly comprises a first flange having a distal end portion and a second flange having a distal end portion, the first flange connected to the load supporting structure, the first flange extending over and encompassing at least a portion of the tail gate, the second flange connected to the load supporting structure and extending over and encompassing at least a portion of the tail gate so that the tail gate is disposed between the distal end portion of the first flange and the distal end portion of the second flange.

45. The storage rack of claim 44 wherein the first flange of the bracket assembly is provided with a substantially U-shaped distal end portion and the second flange of the bracket assembly is provided with a substantially L-shaped distal end portion.

46. The bracket assembly of claim 44 wherein the first flange is provided with an aperture in the distal end portion thereof and wherein the bracket assembly further comprises:

a clamp member positioned between at least a portion of the distal end portion of the first flange and the tail gate such that a portion of the clamp member is disposed in a covered position relative to the aperture in the first flange; and
an adjustment member disposable through the aperture in the first flange for compressing engagement with the clamp member of the tail gate for securing the first flange of the bracket assembly to the tail gate.

47. The storage rack of claim 46 wherein the load supporting structure is provided with at least one threaded bore and wherein the bracket assembly is provided with at least one aperture therein, the aperture being alignable with the at least one threaded bore in the load supporting structure; and a threaded bolt positionable through the aperture so as to threadingly engage the threaded bore and thereby connect the second flange of the bracket assembly to the load supporting structure.

48. The storage rack of claim 43 wherein load supporting structure includes a platform, and wherein the lift member is connected to the platform of the load supporting structure.

49. The storage rack of claim 48 wherein the lift member is pivotally connected to the platform.

50. The storage rack of claim 43 wherein the lever is connected to the lift member near the distal end of the lift member.

51. The storage rack of claim 43 wherein the lever is pivotally connected to the lift member.

52. The storage rack of claim 43 wherein the lift assembly further comprises
at least one guide, the at least one guide connected to the lift member for guiding the tire onto the lift member.

53. The storage rack of claim 52 wherein the at least one guide is integrally connected to the lift member.

54. A method for loading a load onto a vehicle, comprising the steps of:

positioning a lift assembly of a storage rack connected to the vehicle to
an extended position wherein a portion of the lift assembly forms
a ramp; and
moving the load across at least a portion of the ramp formed by the lift
assembly toward the load supporting structure; and
moving the portion of the lift assembly forming the ramp towards the
load supporting structure to position the load onto the load
supporting structure.

55. The method of claim 54, wherein the portion of the lift assembly forming the ramp is further defined as a lever extending from a lift member.
56. The method of claim 55, wherein the lever is further defined as being pivotally connected to the lift member.
57. The method of claim 55, further comprising the step of moving the the lever and the lift member to a folded position to form a cage capable of retaining the load on the load supporting structure.
58. The method of claim 54, further comprising the step of mounting the storage rack to a tail gate of the vehicle.

59. The method of claim 58, further comprising the step of lowering the tail gate when the storage rack is connected thereto.

60. Method for making a storage rack connectable to a mounting structure of a vehicle for supporting a load, comprising the steps of:

providing a load supporting structure adapted to support the load when the load is associated with the load supporting structure;

connecting a bracket assembly to the load supporting structure, the bracket assembly being attachable to the mounting structure; and

connecting the lift assembly to at least one of the load supporting structure and the bracket assembly for facilitating lifting of the load to the load supporting structure whereby the load can be supported by the load supporting structure and thus the vehicle when the bracket assembly connects the load supporting structure to the mounting structure of the vehicle.

61. The product produced by the method of claim 60.